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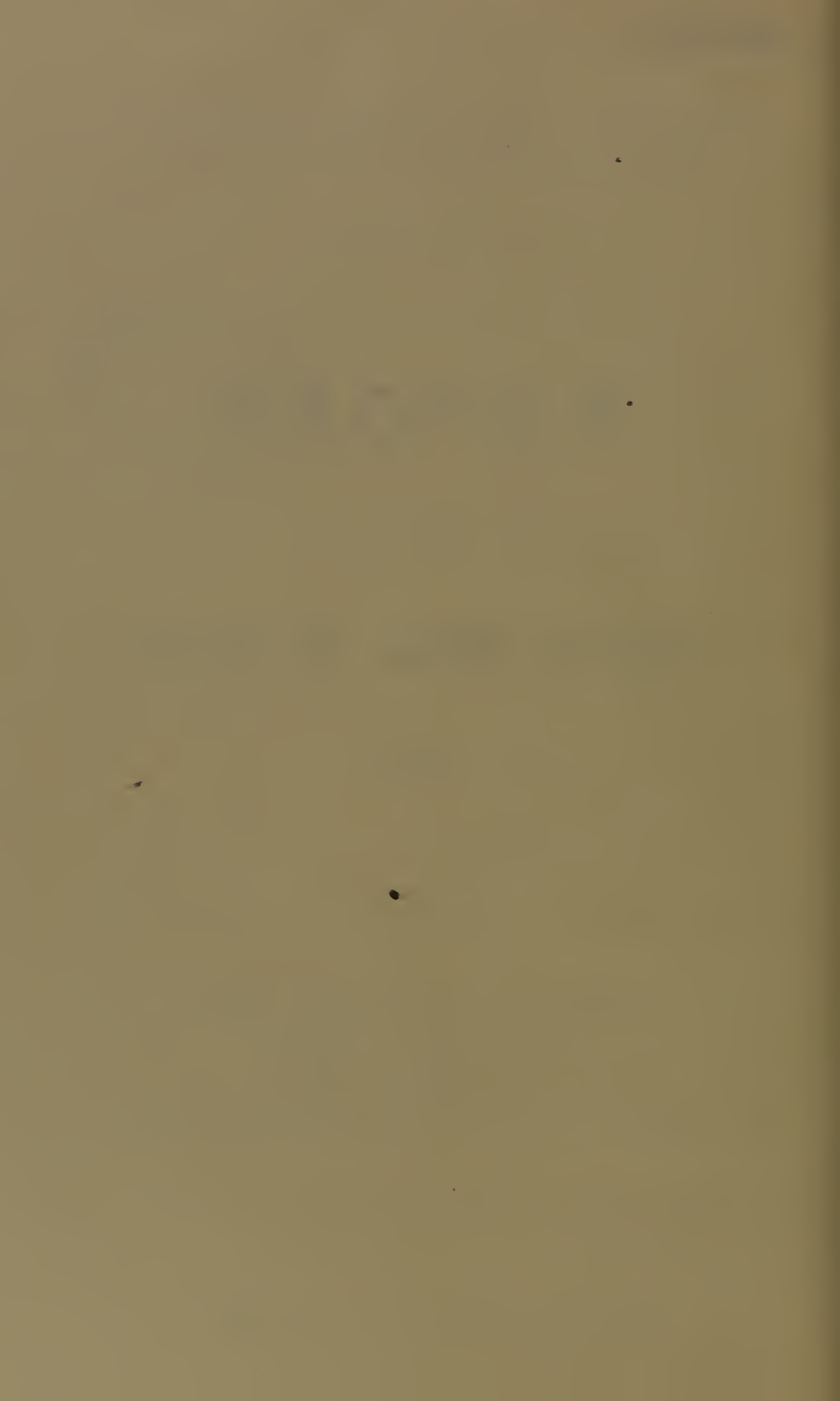
1946.

WILLIAM E. ORCHARD, M.D., D.P.H.,

MEDICAL OFFICER OF HEALTH

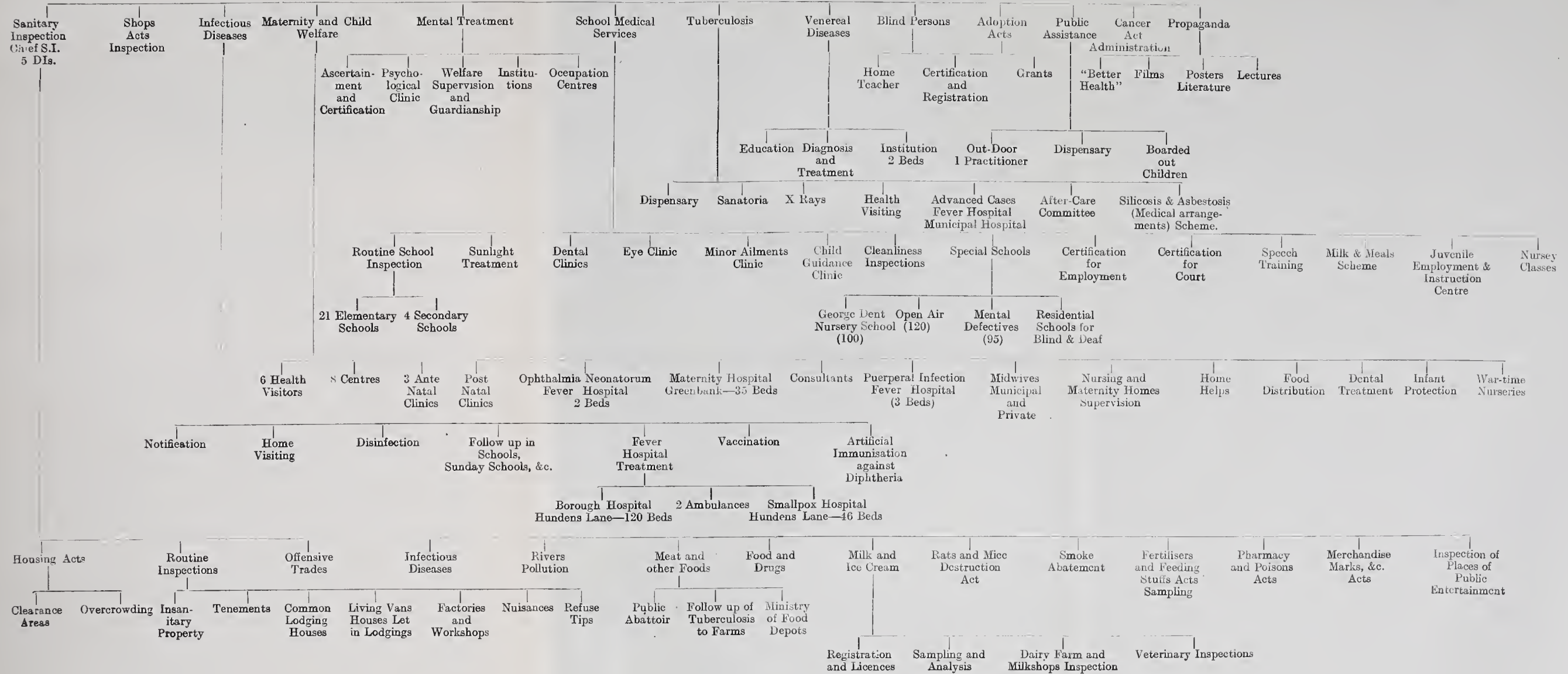
SCHOOL MEDICAL OFFICER

MEDICAL SUPERINTENDENT OF CORPORATION HOSPITALS.



HEALTH SERVICES IN DARLINGTON COUNTY BOROUGH—1946.

DARLINGTON CORPORATION—MUNICIPAL SERVICES.



ANNUAL REPORT, 1946.

Mr. Chairman, Ladies and Gentlemen,

I have the honour to submit my annual report on the working of the Health Department for the year 1946. In doing so I wish to record my gratitude for your generous and continued support.

In a period of national recovery, after a disastrous war, the most pressing problems are not the problems of a small community, but those of the country as a whole. The return to normal of the national economy has been slow, and the multiple inadequacies which surround us on every side are the chief influences on the life of the individuals of the town today. Solid progress in municipal affairs is dependent on a stable municipal background, and it says much for my predecessors and the foundation that they laid that I am able to record a steady continuity of effort.

In studying the various statistics presented in this Report you will be struck by the continued low incidence of infectious disease and by the maintenance of the general nutrition of the population at a satisfactory level. It might well be that these two go hand in hand, but as there are various other epidemiological factors which should be taken into consideration (variations in the virulence of the organism being as important as the resistance of the individual), it would be unwise to attribute the low incidence to any one factor. At the same time I feel that I should once more point out one outstanding achievement in Infectious Diseases Control, and that is the continued low incidence of diphtheria. This disease is preventable. In the U.S.A., where diphtheria immunisation started in 1920 and was energetically practised in subsequent years, the estimated number of children under 15 who have been immunised is between 65 per cent. and 70 per cent. In 1942 the deaths from diphtheria in the 93 great towns (with a total population of over 37,000,000) had an aggregate of 260, and in 33 of these towns there were no deaths at all. For comparison, the deaths from diphtheria in England and Wales in 1942, with a population of 42,000,000, were 1,827 (Report of Chief Medical Officer to Ministry of Health, 1939-1945). The Ministry of Health Diphtheria Immunisation Campaign got well under way this year and the present low incidence is directly attributable to the success of this Campaign. A continuous effort is, however, necessary to maintain a high rate of children who have been immunised and the objective of 75 per cent. immunised children is our aim. Immunisation does not merely consist of the requisite number of injections given in one course at one period of a child's life; successful protection during the dangerous period (6 months—15 years) can only be achieved by reinforcing injections at intervals during this period, given one year later and subsequently when a child enters on each new stage of its school life. Careful control (by Schick testing) is essential when these reinforcing injections are to be given. This revised and more complete procedure is in force in the Health Department and School Medical Service. It

is not too much to ask of a parent to insure against the unnecessary death of a beloved child by so simple and painless a precaution.

There are, however, other important deficiencies which are having an increasing effect upon the life of the individual in this country today, the chief of these being the lack of houses. The present deplorable housing situation accentuates all the other psychological factors which are contributing to the disruption of family life. It is not enough for the politician and the social worker to say that the British Empire is dependent upon the maintenance of the family unit; the family unit, to preserve its unity, should have four walls and a roof of its own. It is impossible to build up that sense of interdependence of the individuals in the family if they are living a communal existence with two or three other families in a very small house. It is mere wishful thinking for hygienists to talk of the great future of "environmental medicine" when the only environment available for a large proportion of the population is, by most hygienic standards, totally unsuitable.

No elaboration of mine could add to your knowledge of the acuteness of this problem. I would only recall to your mind the evils of overcrowding, the lack of adequate sanitary facilities, the absence of privacy, the unhygienic methods of preparing and serving food, the irritation of constant proximity to persons who are "domestic aliens." The wonder of this year has been the low incidence of infectious disease, when environmental conditions were propitious for its spread, but more wonderful has been the tenacity and courage with which these conditions have been faced and endured.

Nutrition.—The comparative figures for the nutrition of the school children for 1944, 1945 and 1946 are given below and confirm that there has been no diminution in the physical state of the school children.

		1944		1945		1946
A.	.....	20.0%	...	19.8%	...	10.1%
B.	.....	71.9%	...	78.7%	...	88.8%
C.	.....	8.0%	...	1.5%	...	1.1%
D.	.....	0.1%	...	—	...	—

Note.—A—Excellent. B—Normal. C—Subnormal. D—Malnutrition.

The shortage of foodstuffs has been offset by the continuance of rationing of essential items, ensuring that if the ration is bought, well cooked and eaten, a reasonable nutritional level is attained. However, it is certain that the standard of cooking in this country is considerably below the level necessary for the proper conversion of the raw foodstuffs and of the rationed foods into nutritious dishes conserving to the fullest possible extent their calorific and vitamin values. A "snap check" of 359 mothers attending the Child Welfare Centres as to whether they read and practised the hints given in the Government "Food Facts" showed that 45 per cent. did not read the advertisements, 31.5 per cent. read but did not practise, and 23.5 per cent. read and practised them. Therefore only a quarter of the people to whom the message was directed received it. Greater

attention must therefore be paid to instruction in cooking so long as we are compelled to use the very small variety of foodstuffs available to us today. There are thus, to my mind, two important national objectives which should be the concern of the Government, firstly to give priority above all other priorities to the production of houses, and secondly to improve the variety of available food and, failing that, to bring home by every possible means the importance of satisfactory cooking.

Dietician's Survey.—Having regard to the fact that this country has been on a controlled diet since 1939 and in view also of the difficulties in providing replacements for worn-out kitchen equipment, it was decided to take stock of the feeding arrangements of patients and staff of the Corporation's hospitals. Accordingly a dietician from the Ministry of Health visited these institutions and reported on a detailed survey of the situation. In effect the dietician was satisfied with the overall dietary arrangements, the cooking and serving facilities, but she made several helpful recommendations on which the Committees concerned have taken action wherever possible, the prevailing shortages being the deciding factor in the full implementation of these recommendations.

Nursing Situation.—Shortage of nurses continues to be widespread and in Darlington we have been forced to take certain steps to offset the shortage. Part-time nurses are employed, who give so many hours each in the day. Limitation of admissions of scarlet fever and measles cases to patients who come from poor housing conditions has resulted in a lowering of the patient-days, but no case is refused which is recommended by the family doctor. The Isolation and Maternity Hospitals, by their specialised nature, require skilled nurses and the employment of nursing auxiliaries is not the solution. The nursing of an acute infectious case demands a knowledge of the principles of infection and its control, and maternity cases must at all times be handled with special care. There is, however, a place in the Maternity Hospital for nursing auxiliaries who will be content to give service in the less interesting side of nursing, and ward orderlies have played an important part in the successful running of the wards.

Tuberculosis.—The death rate from tuberculosis in Darlington for the past 10 years is:—

					Deaths per 1,000 population.	
					Pulmonary.	Non-Pulmonary.
1937	...	...	...	...	.91	.16
1938	...	...	...	...	.99	.10
1939	...	...	...	...	.68	.05
1940	...	...	...	...	.80	.14
1941	...	...	...	...	.69	.11
1942	...	...	...	...	.67	.15
1943	...	...	...	...	.62	.18
1944	...	...	...	...	.59	.15
1945	...	...	...	...	.65	.09
1946	...	...	...	...	.56	.08

On the basis of four beds to five deaths per annum, the provision of beds should be 45. Twenty beds are set aside for the treatment of this disease in the Infectious Diseases Hospital, and in addition four chalets are available in the grounds for suitable cases. It is emphasised that the cases admitted for treatment are not advanced cases, and many cases are admitted for a period of observation or while waiting for sanatorium beds elsewhere. Treatment is on Sanatorium lines and considerable care is given to the selection of the appropriate diet and the gradual increase of a patient's physical activity. As a Joint Authority in the Poole Sanatorium, Darlington has 15 beds. The co-operation and helpfulness of the Medical Superintendent (Dr. R. C. Cunningham) and his staff is gratefully acknowledged and Darlington patients have every reason to be satisfied with their accommodation and treatment in this up-to-date sanatorium. The number of cases admitted to other sanatoria are given in the body of the report. With the opening of four further chalets in the grounds of the Infectious Diseases Hospital the provision of beds for the treatment of tuberculosis in Darlington will be satisfactory.

The Tuberculosis After-Care Committee has continued its beneficent work and 95 patients were assisted with grants of money and the provision of milk and clothing. The number of articles provided from the "Loan Cupboard" has been extended, and Occupational Therapy was inaugurated during the year. The filling of the enforced leisure time of the patients by useful and even profitable handicrafts has proved a very useful addition to their treatment. The capabilities and enthusiasm of the voluntary worker, Mr. Wilson, has made this innovation a great success.

Mass Miniature Radiography.—6,445 persons were X-rayed during the year by the Mass Radiography Unit. Of this number 40 were subsequently referred to the Dispensary for consultation, 18 of whom were found to be in need of continued supervision. Two cases required admission to Poole Sanatorium for treatment. This preliminary survey was undertaken to discover the extent of tubercular infection in selected groups of the population. It was felt that 1946 would be a suitable year to make this survey when the effects of six years of war under conditions of strain and blackout could be gauged. The persons chosen were in the following categories:—

- (1) Industrial workers.
- (2) School teachers.
- (3) Boys from an approved school.
- (4) General public.

The results shown above indicate the need for the extension of this periodic examination, and particularly of adolescents commencing their working life, those whose work brings them into daily contact with children and those who are exposed to industrial hazards. It is intended that some such periodic survey will become a standard procedure in the Health Services of the Borough.

Maintenance Allowance—Ministry of Health Memo. 266/T.—During the year 43 new cases received allowances under this regulation and at the close of the year 33 cases were still in receipt of the allowance.

Venereal Diseases.—Statistics for the year give evidence of the continued decline in the morals of the community. Despite the ending of the war, the lowered military population in the area and the return of the great proportion of the people to normal peacetime pursuits, the number of new cases attending for diagnosis has increased from 376 in 1945 to 569 in 1946. The latter is the highest number ever to have attended in one year. Of this total 76 were patients transferred in from other areas.

The number of non-venereal cases numbered 265 of the 569 new patients. New cases of syphilis numbered 94 against 48 in 1945 and for gonorrhoea the incidence was 151 in 1946 and 101 in 1945.

Defaulters numbered 105 during the year.

Twenty-one notifications were received under Regulation 33B. Seventeen of these were followed up and 10 were subsequently traced and examined.

Home Helps.—Since 1918 Darlington has had a Maternity Home Help Service, and the lying-in period of many women has been assisted by the timely help of the Council's staff of four full-time Helps. They are placed by the Senior Health Visitor. An extension of this service to homes in which there is sickness, old age or infirmity, and certain cases of domestic emergency for which an extra pair of hands in the home is a necessity, has been successfully accomplished and the popularity of this new activity is increasing. The organisation and running of the scheme is in the enthusiastic hands of the W.V.S., to whom and to Mrs. Johnson, the County Borough Organiser, my special thanks are due.

Day Nurseries.—After the handover by the Ministry of Health to the Local Authority on 31st March, 1946, two Day Nurseries were established, one at Albert Hill and one at North Road in the old war-time nursery premises. The Albert Hill Nursery was not in great demand and it was decided to concentrate on one nursery, with amalgamation of staffs. "Three-hour Creches" to provide trained supervision of the children of mothers requiring rest, or relief from the continuous care of small children, were started, utilising the Maternity and Child Welfare Clinic premises in various parts of the town. The Creches were not a success and it became obvious that there was no demand in Darlington for this provision. They were accordingly discontinued. The Day Nursery at North Road, however, is now beginning to be recognised as a most necessary branch of the child welfare services and a waiting list of prospective applicants exists. When the need for expansion becomes more pressing consideration will be given to the opening of other nurseries.

Care of Illegitimate Children and Children Proposed for Adoption.—The Health Visitors and Child Protection Visitor to the Public Assistance Department maintain a close supervision of all children under the care of the Local Authority. Frequent visits of inspection are made and advice given. The mothers are encouraged to attend Child Welfare Centres regularly and the children of mothers who are forced by economic circumstances to go to work are admitted to the Day Nursery. Adoption cases are specially reported on, both from the adopting parents and the child's viewpoint, and in every case reports are furnished to the Courts making the adoption order, for the guidance of the Magistrates.

It is with very great pleasure that I mention the splendid co-operation of the staff of the Health Department, without which such progress as has been made could not have been achieved.

I have the honour to remain, Mr. Chairman, Ladies and Gentlemen,

Your obedient servant,

W. E. ORCHARD,

Medical Officer of Health.

STAFF.

Medical Officer of Health, School	William E. Orchard, M.D., D.P.H.
Medical Officer, Chief Tuberculosis Officer, Medical Certifier under Mental Deficiency Acts.	(from 1st January, 1946).
Deputy Medical Officer of Health, Venereal Diseases Medical Officer.	Donald John Campbell, M.B., Ch.B., D.P.H. (from 1st December, 1946).
Acting Deputy Medical Officer of Health	Frank A. Paul, L.R.C.P. and S., D.P.H.
Assistant Medical Officer of Health for Maternity and Child Welfare	Ruth Dearing, M.B., B.Ch., B.Sc., (from 4th July, 1946).
Assistant Medical Officer of Health for Tuberculosis and Public Assistance	Frank A. Paul, L.R.C.P. and S., D.P.H.
Temporary Part-time Assistant Medical Officer for Maternity and Child Welfare	Kamell Girgis, M.D., F.R.C.S., D.P.H. (till 31st July, 1946).
Assistant Medical Officer, Public Assistance Committee	C. D. Stone, M.R.C.S., L.R.C.P., (on active service).
Temporary Assistant Medical Officer	Arthur Ingham, M.B., Ch.B.
Assistant Medical Officer of Health for Schools and Public Vaccinator	Annabella McGarrity, M.B. Ch.B., D.P.H., D.O.M.S.
School Dental Officer	J. L. Liddell, L.D.S.
Assistant Dental Officer	V. L. L. Hall, L.D.S. (from 21st February, 1946).
Public Analyst	C. J. H. Stock, B.Sc., F.I.C.
Chief Sanitary Inspector	A. E. Wade.
Deputy Chief Sanitary Inspector	F. Ward.
Sanitary Inspectors	J. H. Burows (till 28th February, 1946). J. R. White. A. F. Theakston. J. A. H. Brocklebank (from 11th March, 1946). S. Daley (from 1st May, 1946).
Shops Inspector	H. R. Kirk (till 23rd April, 1946). R. Billings (from 24th April, 1946).
Senior Health Visitor	Miss I. M. McIlwaine, S.C.M., S.R.N.

District Health Visitors and Child Life Protection Officers	... ..	Miss E. H. Fleetham, H.V.C., S.C.M., S.R.N. Miss M. Milestone, H.V.C., S.C.M., S.R.N. Mrs. V. W. Anderson, H.V.C., S.C.M., S.R.N. (till 30th August, 1946). Miss E. Winch, H.V.C., S.C.M., S.R.N. Miss E. Hunter, H.V.C., S.C.M., S.R.N. (till 28th Nov., 1946). Miss F. E. Smith, H.V.C., S.C.M., S.R.N. (from 8th Nov., 1946).
Part-time Child Life Protection Officer	... ..	Miss V. I. Smiles.
Tuberculosis Health Visitor	... ..	Miss A. Thornton, H.V.C., S.C.M., S.R.N. (from 6th May, 1946).
Matron Infectious Diseases and Smallpox Hospitals	... ..	Miss Gaynor L. Pritchard, S.R.N., S.C.M., R.S.F.N.
Matron Maternity Hospital	... ..	Miss Kate I. Kemp, S.R.N., S.C.M.
Superintendent Nurse Municipal Hospital	... ..	Miss A. Moran, S.R.N., S.C.M.
Mental Welfare and Blind Welfare Officer	... ..	Miss N. Black.
Municipal Midwives	... ..	Mrs. E. Harris, S.C.M. (till 30th April, 1946) Mrs. F. R. Hawley, S.C.M. Mrs. I. Wilson, S.C.M. Miss E. Shaw, S.C.M.
Matrons of Nurseries		
Hundens Lane	... ..	Mrs. M. Forster, S.R.N. (till 31st March, 1946).
Albert Hill	... ..	Miss D. S. Owen, S.R.N.
North Road	... ..	Miss R. Green, S.R.C.N. (till 31st December, 1946).
Maternity and Child Welfare Home Helps	... ..	Miss L. Robinson (permanent). Mrs. M. Botterill (temporary). Mrs. C. E. Rispin (temporary). Mrs. M. Hodgkinson (temporary).
Registrar of Births, &c.	... ..	E. K. Corlett.
Chief Clerk	... ..	E. C. Stainsby.
Vaccination Officer	... ..	Miss Doris Hutton (till 30th April, 1946). Hugh R. Kirk (from 1st May, 1946).

Clerical Staff	Miss F. E. Gibbon Miss D. Hutton (till 30th April, 1946). Miss F. I. Goodwill. Miss D. E. Tones (from 1st April, 1946). Miss D. Robinson (from 19th August, 1946). Hugh R. Kirk (from 1st April, 1946). I. Burnley. D. G. Warde .
Temporary Clerks	Mrs. E. Ward (till 9th April, 1946). H. Evans. Miss E. Scott. Mrs. M. I. L. Howlett (till 15th June, 1946). Miss I. Stockdale. Mrs. M. McDermid (till 29th June, 1946).
Messenger Girls	Maureen Davison (till 13th July, 1946). Lillie Wanless (from 17th Sept., 1946).
V.D. Orderly	J. T. H. Litton.
Home Visitor for Blind	C. F. Cooke.
Ratcatcher (part-time)	J. R. Oxley (till 11th May, 1946).
Rodent Operative	R. S. Walton (from 11th April, 1946).

VITAL STATISTICS.

The figures for birth and death-rates are based on our own returns corrected for inward and outward transfers.

During the year ended 31st December, 1946, the number of births assignable to the Borough was 1,621, 807 males and 814 females. Excluding the deaths of 143 non-residents, there were 989 deaths, 511 males and 478 females including 56 transfers. These figures give a birth-rate of 19.6, and a death-rate of 11.9 per 1,000 of an estimated population of 82,710 compared with 17.5 and 12.4 last year. Figures for England and Wales, birth rate 19.1, death rate 11.5.

The deaths occurred at the following ages :—

Under 1 week	....	37		1— 2 years	....	4
1— 2 weeks	....	6		2— 5 „	....	5
2— 3 „	....	0		5—15 „	....	6
3— 4 „	....	2		15—25 „	....	18
1— 3 months	....	7	} Total 66	25—45 „	....	61
3— 6 „	....	7		45—65 „	....	258
6— 9 „	....	7		65—75 „	....	271
9—12 „	....	0		75 years and upwards	....	300

Still-births registered, 64; Infantile Mortality Rate, 39.5 per 1,000 births.

Infantile Mortality (England & Wales) 43 per 1,000 births.

Illegitimate Infants Born, Males, 52; Females, 51; Total, 103. Died, 6.

Institutional Deaths :—	Residents.	Non-Residents.	Total.
Municipal Institution	143	13	156
Memorial Hospital	144	108	252
Borough Isolation Hospital	11	2	13
Greenbank Maternity Hospital	18	6	24
Nursing Homes	2	4	6
Institutions outside Borough....	35	—	35

Inquests held, 46.

Uncertified Deaths, 28.

Deaths occurred from the following causes :—

WARD	Harrowgate Hill	North Road	Cockerton	Northgate	Piermont	Central	North-East	Eastbourne	West	South	TOTAL	Inward Transfers	GRAND TOTAL
1 Typhoid and paratyphoid fevers ...	...	...	...	...	...	...	...	...	...	...	...	...	...
2 Cerebro-spinal fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...
3 Scarlet fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...
4 Whooping cough ...	...	...	...	...	...	...	...	...	...	...	...	1	1
5 Diphtheria ...	...	...	...	...	...	...	1	...	...	...	1	...	1
6 Tuberculosis of respiratory system ...	5	4	5	6	3	5	10	5	2	2	47	2	49
7 Other forms of tuberculosis ...	1	...	1	1	...	3	...	...	1	1	8	2	10
8 Syphilitic disease ...	1	1	1	...	...	...	...	...	...	...	3	3	6
9 Influenza ...	...	2	1	1	...	1	...	...	1	1	7	...	7
10 Measles ...	...	...	...	...	...	...	...	...	...	...	...	...	...
11 Acute poliomyelitis and polioencephalitis ...	...	...	...	...	...	...	...	...	...	...	...	...	...
12 Acute infectious oncephalitis ...	...	...	2	...	...	...	...	...	...	...	2	...	2
13M Cancer of buccal cavity and œsophagus ...	...	2	...	...	...	...	...	2	2	...	6	...	6
13F Cancer of uterus ...	1	1	...	1	...	1	2	2	1	...	9	...	9
14 Cancer of stomach and duodenum ...	1	3	3	4	3	1	2	3	4	...	24	...	24
15 Cancer of breast ...	...	...	1	1	2	1	...	1	2	...	8	...	8
16 Cancer of all other sites ...	7	8	13	9	9	10	9	10	7	10	92	8	100
17 Diabetes ...	...	...	...	...	1	...	...	1	3	...	5	...	5
18 Intra-cranial vascular lesions ...	3	4	3	6	6	3	4	3	8	3	43	3	46
19 Heart disease ...	13	9	15	12	9	15	11	22	13	16	135	7	142
20 Other diseases of the circulatory system ...	9	4	17	11	8	13	10	17	18	22	129	8	137
21 Bronchitis... ...	2	4	7	6	4	7	3	10	3	3	49	...	49
22 Pneumonia ...	1	2	1	1	1	4	3	4	2	2	21	...	21
23 Other respiratory diseases ...	2	1	1	1	4	...	1	3	1	...	14	1	15
24 Ulceration of the stomach or duodenum ...	2	...	1	2	...	...	1	...	2	...	8	...	8
25 Diarrhœa (under 2 years of age) ...	1	1	...	...	...	...	2	...	1	...	5	1	6
26 Appendicitis ...	...	1	1	...	...	...	...	...	...	...	2	...	2
27 Other digcstive diseases ...	3	1	1	2	1	3	4	...	3	2	20	...	20
28 Nephritis ...	2	1	1	...	...	4	5	4	3	2	22	...	22
29 Puerperal and post-abortive sepsis ...	...	...	...	...	...	1	1	...	...	...	2	...	2
30 Other maternal causes ...	...	...	...	...	...	1	...	...	1	...	2	...	2
31 Premature birth ...	...	1	3	1	1	1	4	6	2	...	19	1	20
32 Congenital malformations, birth injury, infantile disease ...	4	1	...	1	...	4	3	8	4	...	25	2	27
33 Suicide ...	1	2	...	3	...	...	3	1	...	...	10	1	11
34 Road traffic accidents ...	1	2	...	1	...	2	...	...	1	1	8	2	10
35 Other violent causes ...	2	1	...	...	...	3	2	...	2	...	10	6	16
36 All other causes ...	22	22	13	23	12	25	13	26	20	21	197	8	205
Totals ...	84	78	91	93	64	108	94	128	107	86	933	56	989

INCIDENCE OF INFECTIOUS DISEASES.

DISEASE.	Borough Cases				Cases removed to and Deaths in Isolation Hospital							
	Total Cases Notified		Total Deaths		From Borough				From Rural and other Districts			
					Cases		Deaths		Cases		Deaths	
	C.	M.	C.	M.	C.	M.	C.	M.	C.	M.	C.	M.
Smallpox ... ..	...	...	...	...	...	...	...	...	...	1	...	...
Scarlet Fever	140	...	...	...	108	...	...	...	19	15	...	...
Diphtheria	37	...	1	...	37	...	1	...	8	2	1	...
Typhoid and Para-typhoid Fevers ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	20	...	...	...	2	...	...	...	1	...	...	...
Ophthalmia Neonatorum	1	...	...	...	...	...	...	...	...	...	...	...
Puerperal Pyrexia	8	...	1	...	2	...	...	...	2	...	...	...
Babies with Mothers	1	...	...	...	1	...	...	...	...	...	...	...
Pneumonia	44	...	21	...	...	...	...	...	...	...	...	...
Measles and German Measles	179	...	...	...	2	...	...	...	1	1	...	...
Encephalitis Lethargica ... ..	...	...	1	...	...	...	...	...	...	1	...	...
Pulmonary Tuberculosis	104	3	47	...	52	...	9	...	...	...	...	...
Other forms of Tuberculosis	28	...	8	...	...	...	...	...	1	...	1	...
Whooping Cough	179	...	...	...	1	...	...	...	...	...	...	...
Cerebro-spinal Fever	6	...	...	...	6	...	...	...	1	9	...	...
Acute Poliomyelitis ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	1	...	...	...	...	...	...	...	...	...	...	...
Other Conditions	54	2	2	...	55	2	1	...	7	18	...	1
Malaria Relapse	1	1	...	...	...	...	...	...	...	...	...	...
Icterus Neonatorum ... ..	...	...	...	...	...	...	...	...	...	...	...	...
Totals	803	6	81	...	266	2	11	...	40	47	2	1

MUNICIPAL INSTITUTION (Hospital Section), YARM ROAD :—

	Men.	Women.	Children.	Total.
In	61	60	7	128
Admitted	230	177	43	450
Discharged	145	113	46	304
Deaths	91	65	1	157
Remaining	55	59	3	117

Rate-aided persons of unsound mind not included above :—

Residential	6 Men.	10 Women	Total	16
Out-relief	4 „	9 „	„	13

MATERNITY AND CHILD WELFARE.

NOTIFIED BIRTHS :—				Males		Females		Total	
				Leg.	Ill.	Leg.	Ill.	Leg.	Ill.
Live-Births	....	....	762	26	791	20	1,553	46
Still-Births	....	....	18	3	27	1	45	4
Total			780	29	818	21	1,598	50
By Midwives	....	....	....	351	406	757		
By Doctors	....	....	....	12	9	21		
By Parents	....	....	....	0	0	0		
By Midwives in Institutions	....			445	424	869		
By Doctors in Institutions	....			1	0	1		

	Patients In at Jan. 1/46,	Admitted	Discharged	Deaths	Remaining	Days' Treatment
Greenbank Maternity Hospital	35	818	819	5	29	10,741

CHILD LIFE PROTECTION.—2 on Register, 6 new, 1 child was returned to her parents, 1 adopted, 6 now on Register. 83 Visits and 124 office interviews. In addition many telephone enquiries were dealt with regarding suitable homes, adoptions, etc.,

CENTRES.—Mothers and babies, attendances. 20,954. Ante-Natals 8,406. 29,032 lbs. Dried milk sold.

DENTAL TREATMENT.—Mothers 7; Children under 5 years 11; Total 18. Total attendances. 23; Extractions, 47; Dentures supplied to 0 person. Anæsthetics, 0; Fillings, 0; other operations 5.

MATERNITY HOME HELPS.—Cases. 80. Day's Service, 958.

DOMESTIC „ „ „ 58. „ „ 682.

MIDWIVES' ACTS.—Emergency calls to Doctors, 187. Inspector's Visits 144.

HEALTH VISITORS :—	First Visits	Re- Visits	Total Visits
Expectant Mothers	306	42	348
Infants under 1 year	1359	2286	3645
Children 1 to 5 years	—	4102	4102
Infectious Diseases	317	5	322
Infant Deaths	37	—	37
Still-Births	29	—	29
Miscellaneous Visits	735	29	764
Maternal Deaths	—	—	—
Illegitimate Children	64	399	463
Adoptions	38	32	70
Puerperal Pyrexia	4	—	4

QUEEN'S NURSES' ASSOCIATION :—			
Maternity Cases	162	2672	2834
Midwifery Cases	199	3236	3435
Puerperal Pyrexia	2	45	47
Acute Primary Pneumonia	5	106	111
Children under 5 years	107	431	538
Ante-Natal Cases	—	2166	2166
Post-Natal Cases	—	388	388

VACCINATION :—

Births Registered, 1676; Successful Vaccinations, 351; Conscientious Objections, 967; Insusceptibility, 5; Died before Vaccination under 1 year, 67.

DIPHThERIA IMMUNISATION.—655 under 5 years, 456 at 5—15 years. Total since 1935, 10,707.

VENEREAL DISEASES CLINIC.

	Darlington		Other Authorities	
	Males	Females	Males	Females
Suspected Venereal Diseases—New Cases	238	114	145	72
Non-Venereal Diseases	90	76	61	38
Total Attendances of all persons	2,709	1,718	1,157	1,060
In-patient Days	—	—	—	—

TUBERCULOSIS.

Sanatoria	In			Admitted			Discharged			Deaths			Remaining		
	M.	F.	C.	M.	F.	C.	M.	F.	C.	M.	F.	C.	M.	F.	C.
Stannington	—	—	1	—	—	3	—	—	1	—	—	—	—	—	3
Hollywood Hall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bleneathra	4	1	—	1	1	—	5	2	—	—	—	—	—	—	—
Borough Isolation Hospital	5	5	1	21	25	—	18	16	1	1	6	—	7	8	—
Memorial Hospital	—	—	2	1	1	—	1	1	1	—	—	—	—	—	1
Municipal Institution	1	—	—	5	3	4	3	1	3	1	—	—	2	2	1
Poole Sanatorium	7	9	—	19	20	—	16	18	—	1	1	—	9	10	—
Winterton	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
St. Vincent, Orthopædic Hospital	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1

Apparatus provided for 1 neecessitous patient as follows :—

Elbow Splint (1 case).

Railway Warrants issued—74.

Bus Warrants issued—524.

X-ray examinations—

Dr. Fothergill 310 }
 Dr. Glass 517 } 827

Ultra Violet Rays—4.

DOMICILIARY VISITS :—

Health Visitors

Queen's Nurses' Association

Total

First Visits. Re-visits. Total.

140 1,094 1,234

6 144 150

146 1,238 1,384

Dispensary Attendances—1,752.

Doctors' Home Visits—80.

Other Consultations—3.

Letters—445.

Average Attendances.

On Roll. Day.

Municipal Nurseries.

Albert Hill 21 16

North Road 33 19

REPORT OF THE CHIEF SANITARY INSPECTOR, 1946.

Analysis of Inspections, 1946.

Under Public Health and Housing Acts	....	....	....	....	4,727
Van Dwellings	....	....	....	....	203
Common Lodging Houses	....	....	....	....	59
Overcrowded Houses	....	....	....	....	194
Interviews with Owners and Builders	....	....	....	....	1,388
Yards and Courts	....	....	....	....	56
Total Inspections of Housing Conditions	..	....	....	....	6,627
Abattoir	....	....	....	....	565
Emergency Slaughter	....	....	....	....	309
Bakehouses	....	....	....	....	151
Cowsheds	....	....	....	....	110
Milk Retailers	....	....	....	....	224
Ice Cream Premises	....	....	....	....	381
Fried Fish Shops and Offensive Trades	....	....	....	....	270
Markets	....	....	....	....	152
Food premises other than Bakehouses	..	....	....	....	488
Sampling	....	....	....	....	454
Canned Food and Provisions	....	....	....	....	364
Inspections with reference to Food	..	....	....	....	3,468
Verminous Premises	....	....	....	....	171
Pharmacy and Poisons Act	....	....	....	....	59
Visits after Infectious Disease	....	....	....	....	404
Factories, Workshops, etc.	....	....	....	....	363
Drain Testing	....	....	....	....	27
Rat Inspections	....	....	....	....	211
Piggeries	....	....	....	....	158
Investigation of Complaints	....	....	....	....	879
Places of Public Entertainment	..	....	....	....	15
Sundry Inspections	....	....	....	....	66
Scabies	....	....	....	....	1
Ineffective Visits	....	....	....	....	755
Smoke Abatement	....	....	....	....	15
Total of other Inspections	....	....	..	....	3,124
1. Housing Conditions	....	....	....	....	6,627
2. Food	....	....	....	....	3,468
3. Other Inspections	..	....	....	....	3,124
Total Visits	..	....	....	....	13,219

Food and Drugs Act, 1938.

During the year 127 samples were taken and sent for analysis by the Public Analyst. These comprised:—

94 informal samples of milk	} 104
9 formal samples	
1 appeal to cow sample	
2 of cocktails	
3 of fishcakes	
18 of ice-cream	

Of the above, 93 samples of milk complied with the presumptive standard laid down by the Sale of Milk Regulations 1939.

The details of the 11 samples not complying are set out below:—

Sample No.	N.F.S.	Fat	Freezing Point	Deficiency	Formal or Informal	Remarks
9	8.59%	2.90%	-	3.4% Fat	Informal	Deficiencies in N.F.S. and Fat due to natural causes.
30	8.37%	2.85%	- .537°C	.5% Fat	Formal	
35	8.30%	2.80%	- .540°C	6.7% Fat	Formal	
35A	8.27%	2.97%	- .553°C	1 % Fat	Appeal to cow	
13	8.23%	3.15%	- .542°C	Equiv to 3% Added water	Informal	Deficiencies due to natural causes.
28	8.34%	3.65%	- .555°C	Equiv to 2% Added water	Informal	
29	8.13%	2.90%	- .540°C	Equiv to 4.4% Added water	Informal	
65	8.67%	2.75%	-	8.34% Fat	Informal	Warning Given
65A	8.72%	3.00%	-	Just up to standard	Formal	
70	8.72%	2.47%	-	17.8% Fat	Informal	Warning given and advised to ensure that strippings be proportionately added
70A	8.75%	3.00%	-	Just up to standard	Formal	
72	8.69%	2.80%	-	6.70% Fat	Informal	For technical reasons no follow-up samples taken. Verbal warning given.
117	8.12%	3.45%	- .502°C	Equiv to 7% Added water	Informal	Severe warning given. No explanation could be found to account for the addition of water. No adverse sample has been taken from this producer-retailer during the last 30 years.
117A	8.62%	3.50%	-	Up to standard	Formal	

The samples of cocktails and fishcakes were of genuine quality.

Of the 18 samples of ice-cream none contained any prohibited preservative.

From the following table it will be seen that the food value of this commodity was in several cases very low when considered in respect of the price charged to the consumer.

Details.

4 samples contained less than 1% of fat.
 5 samples contained between 1% and 2% of fat.
 4 samples contained between 2% and 3% of fat.
 2 samples contained between 3% and 4% of fat.
 2 samples contained between 4% and 5% of fat.
 1 sample contained 10% of fat.
 2 samples contained between 11% and 15% non-fatty solids.
 7 samples contained between 15% and 20% non-fatty solids.
 9 samples contained between 20% and 26% non-fatty solids.
 The water content varied between 63.80% and 84.20%.
 Average content of water 77%.

Milk (Special Designations) Orders, 1936-46.

Twenty-three licences were in force under the Orders as:—

Accredited—11 Producers, 3 Bottling.

Tuberculin Tested—7 Bottling.

Pasteurised—2.

Ninety-eight samples of milk sold under Special Designation were taken and sent for Bacteriological Examination.

These comprised:—

Pasteurised... ..	42 samples	All complied with the required Tests.
T.T. Pasteurised... ..	14 samples	All complied with the required Tests.
Pasteurised (School milk)... ..	22 samples	3 failed in Methylene Blue Test
Tuberculin Tested	7 samples	1 failed in the M.B. Test
		1 failed in the M.B. Test and the Test for B.Coli.
Tuberculin Tested Certified	2 samples	1 failed in the M.B. Test.
		1 failed in the M.B. Test.
Accredited	11 samples	2 failed in the Test for B.Coli.
		3 failed in both Tests.

In addition to the above 12 samples of Tuberculin Tested milk were taken on behalf of the Ministry of Health and sent to King's College, Newcastle, for M.B. Test. All complied.

Bacteriological Examination of Undesignated Milk.

Eighty-seven samples of undesignated milk were taken and sent for Bacteriological Examination. Although there is no legal standard of cleanliness for undesignated milk, the Health Department does not consider milk to be of satisfactory cleanliness if it does not approximate the standard required for the grade formerly known as Grade A.

Fifty samples were considered to be of satisfactory cleanliness.

Eleven samples gave positive reactions for B.Coli in 0.001 M.L., reactions for B.Coli in each of 1, 2 or 3 tubes of 0.01 ML. and decolourised in the Methylene Blue Test inside the time allowed for Accredited Milk.

Eleven samples gave positive reactions for B.Coli in 0.001 ML., and decolourised in the Methylene Blue Test within the required time and gave total counts for Bacteria per 1 M.L. of 22,500; 27,000; 29,000; 41,000; 43,000; 66,000; 128,000; 286,000; 372,000; 584,000 and 594,000 respectively.

Fifteen samples were most unsatisfactory. They were taken mostly during the months of July and August, which coincided with a wet hay and oat harvest and suggests lack of care during that very trying period.

The details of these samples are set out in the following table and point to the need for pasteurisation of all undesignated milk, particularly during the months of July and August.

Serial No.	Age of sample.	Month taken.	Total No. of bacteria per 1 ML. after incubation at 37°C.	Result of Methylene Blue Test.	Presence or absence of coliform bacilli after 48 hrs. incubation. of 0.01 M.L.
1.	18 hrs.	Jan.	1,188,000	Decolourised in 1½ hrs.	Positive in 2 of 3 tubes of 0.01 ML.
44.	6 hrs.	June	948,000	Decolourised in 4 hrs.	Negative in 3 tubes of 0.01 ML.
45.	18 hrs.	June	356,000	Decolourised in 4½ hrs.	Negative in 3 tubes of 0.01 ML.
52.	?	June	49,000	Satisfactory	Positive in 3 tubes of 0.0001 ML.
67.	6 hrs.	July	920,000	Satisfactory	Positive in 2 of 3 tubes of 0.001 ML.
68.	6 hrs.	July	268,000	Satisfactory	Positive in 3 tubes of 0.01 ML.
69.	6 hrs.	July	900,000	Decolourised in 3½ hrs.	Positive in 3 tubes of 0.01 ML.
71.	18 hrs.	July	1,588,000	Decolourised in 1½ hrs.	Positive in 3 tubes of 0.0001 ML.
72.	6 hrs.	July	1,030,000	Decolourised in 4 hrs.	Positive in 3 tubes of 0.01 M.L.
73.	17 hrs.	July	9,000,000	Decolourised in 1½ hrs.	Positive in 3 tubes of 0.0001 ML.
80.	6 hrs.	Aug.	360,000	Satisfactory	Positive in 3 tubes of 0.0001 ML.
81.	6 hrs.	Aug.	57,000	Decolourised in 4½ hrs.	Positive in 3 tubes of 0.0001 ML.
82.	6 hrs.	Aug.	488,000	Decolourised in 3½ hrs.	Positive in 3 tubes of 0.0001 ML.
79.	?	Aug.	Uncountable	Satisfactory	Positive in 3 tubes of 0.0001 ML.
105.	18 hrs.	Sept.	50,000	Decolourised in 1½ hrs.	Positive in 3 tubes of 0.0001 ML.

In the first case in this list the milk was procured from a farm outside the borough for the first time. The manager of this farm had no experience of clean milk production. The case was notified to the Sanitary Inspector for the district, who gave it immediate attention and subsequent samples were of satisfactory cleanliness.

NOTE.—Tuberculin Tested and Accredited milk standards are:—

1. A sample shall not decolourise in the Methylene Blue Test inside $4\frac{1}{2}$ hours if the samples were taken between 1st May and 31st October and $5\frac{1}{2}$ hours if they were taken between 1st October and 30th April.
2. A positive reaction for the presence of B.Coli should not be in evidence in more than one of three tubes of 0.01 ML.
It is also considered that a total of 100,000 organisms per 1 ML. after incubation should be the maximum.

When interpreting a bacteriological report prevailing temperatures at the time the sample was taken must be considered.

Ice Cream.

Forty-five samples of Ice Cream were taken during the months of May to October inclusive and sent for Bacteriological Examination.

19 of these were reported to be of a high order of bacterial cleanliness.

8 were reported to be slightly below this standard; they gave a positive reaction for the presence of B.Coli in all of 3 tubes of 0.01 gm. after 4 hours' incubation.

13 were of an unsatisfactory order of cleanliness; they gave a positive reaction for the presence of B.Coli in dilutions so low as 0.001 gm. and 0.0001 gm. respectively.

5 samples were reported to be grossly contaminated; they gave total counts per gm. of 1,425,000; 1,740,000; 2,432,000; 2,900,000; and 18,900,000 respectively; and gave positive reactions for the presence of B.Coli in 3 tubes of 0.01 gm; 0.001 gm; 0.001 gm; 0.01 gm; and 0.001 gm respectively.

It was gratifying to note that upon receiving the reports of the unsatisfactory samples, that after visits to and instruction given to those concerned by the Sanitary Inspectors, very satisfactory samples were subsequently obtained, giving total counts of 9,600 (average) organisms per 1 gm. with negative reaction for the presence of B.Coli in 0.01 gm. after 48 hours' incubation.

At the present moment there is no legal standard of bacterial cleanliness for Ice Cream, but this Health Department has decided that Ice Cream should approximate a degree of cleanliness similar to that required for the former designation "Grade A" for milk.

Biological Examination of Milk.

Twenty-four samples of milk were sent to King's College, Newcastle, for biological examination for tubercle bacilli. In 23 cases Tubercle Bacilli was not found. In the case where Tubercle Bacilli was found the herd concerned was examined by the Veterinary Officers of the Ministry of Agriculture and Fisheries. The affected animal could not be found, but it was learned that a cow had been sent to the knackery soon after the sample had been taken and that this animal had been affected with Tuberculosis.

Factories Act, 1937.

The number of factories without mechanical power (including bakehouses) on the register at the 31st December, 1946, was 287 and the number of factories with mechanical power was 243.

Bakers and Confectioners	...	...	...	...	81
Dressmakers, Millinery, &c.	...	...	...	...	25
Boot Repairing	...	...	...	...	45
Joiners, Cabinet Makrs, Sawmills	...	...	...	...	58
Tailors	...	...	...	...	20
Plumbers	...	...	...	...	16
Blacksmiths, &c.	...	...	...	...	8
Painters	...	...	...	...	9
Upholsterers	...	...	...	...	7
Unclassified	...	...	...	...	261
					<hr/>
					530
					Remedied
					during
					1946.
Defects.			Found.		
Want of Cleanliness	...	...	1	...	1
Sanitary Conveniences:—					
Insufficient	...	...	4	...	4
Unsuitable or defective	...	...	15	...	15
Not separate for sexes	...	...	1	...	1
Other offences	...	...	9	...	9
					<hr/>
Total	...	30	...	30	

Six notices of defects to be dealt with under the Factory Act were received from the Factory Inspector, and in each case the premises were inspected, notices served where necessary and the defects in all cases remedied.

Outworkers.

Four lists containing the names of 4 Outworkers were received and 4 inspections of the premises of such Outworkers were made.

RODENT CONTROL.

Under the above Act a full-time Rodent Operative was appointed and he commenced duty on 11th April, 1947.

From 15th April to 31st December, 1946, the following is a summary of action taken to deal with infestations.

Surface Infestations:—

Number of infestations dealt with:—

Reservoir (over 200 rats)	...	...	...	3
Major (20—200 rats)	...	...	...	19
Minor (under 20 rats)	...	...	...	146

Bait bases used: Sausage Rusk; Bread Mash.

Poisons used: Zinc Phosphide; Arsenious Oxide.

Estimated total kill (Ministry of Food formula): 2,462 rats.

Reservoir—601; Major 921; Minor—940.

Number of bodies recovered: 873 rats and 44 mice.

Reservoir—255; Major—414 plus 33 mice; Minor—204 plus 11 mice.

Number of infestations cleared:—

Reservoir—2; Major—11; Minor—146.

Number of infestations reduced:—

From Reservoir to Minor—1.

From Major to Minor—8.

Number of proposed re-treatments:—

Reservoir—1; Major—8.

Sewer Infestations:—

Systematic treatment of the sewers was carried out under the direction of the full-time Rodent Operative.

Summary of the two initial treatments carried out:—

	1st treatment Commenced 15/7/46	2nd treatment Commenced 2/9/46
Number of manholes baited	1,448	1,239
Total prebait takes ...	417	289
Total prebait no-takes ...	1,031	950
Total poison takes ...	323	202
Total poison no-takes ...	1,125	1,037
Amount of poison taken (ounces) ...	914	391½
Estimated kill (Ministry formula) ...	2,284 rats...	978 rats

In addition the part-time Rat Catcher continued his duties until 11th May, 1946: 34 places were visited, resulting in 56 rats and 2 nests being destroyed.

INSPECTION OF MEAT AND OTHER FOODS.

During the year 1946 the total number of animals slaughtered was 25,534, including 587 emergencies.

This number is made up of 1,061 cows, 3,394 bovines, 14,370 sheep, 404 pigs and 6,305 calves.

The total weight of food condemned and destroyed was 65 tons 4 cwts. 0 stones 4 lbs.; of which 31 tons 18 cwts. 2 stones 9 lbs. were on account of Tuberculosis. All the above was surrendered voluntarily.

In addition to the above, 14 cwt. 3 stones of food were examined by the Officers of this department and referred to the Ministry of Food, Salvage Department.

In conclusion, I wish to thank all the members of the staff, including the Medical Officer of Health, for the very valuable co-operation given so freely at all times.

A. E. WADE,
Chief Sanitary Inspector.

MATERNITY AND CHILD WELFARE.

Maternity Hospital.—The Maternity Hospital at Greenbank had a record year during which there were 818 admissions. It is hoped in the near future to increase the number of maternity beds to meet the growing demand.

The total number of attendances of mothers and infants at the Maternity and Child Welfare Centres was 20,954, which is an increase compared with the previous year.

Illegitimate Children born in 1946.—There were 60 illegitimate births notified during 1946 (including three stillbirths). In addition the Health Visitor visited three illegitimate children of married women. Of the three children who died one was from gastro-enteritis at 7 months, one enteritis and pneumonia at 4 months, and one from inter-cranial haemorrhage at 1 week. Nineteen babies were adopted, 8 in Darlington and 11 out of the town, by arrangement with outside Adoption Societies. Three children were legitimised by marriage. One child aged three years and four months was removed to Prudhoe Hall Mental Colony; a younger child of ten months was removed to the Municipal Hospital Nursery. The mother is also resident in the Institution.

The general condition and care of the illegitimate children remains good. Thirteen have needed frequent supervision and have been visited monthly or two monthly, others three monthly according to the home conditions.

Illegitimate Children, 1946.

1—Notified as illegitimate	....	....	....	....	60
2—Un-notified as illegitimate but found as such on					
routine visiting	....	....	....	....	3
Stillbirths (included in 1 and 2)	....	....	....	....	3
Deaths under 1 year	....	....	....	....	3
Transfers out (adopted)	....	....	....	....	11
Adopted in town	....	....	....	....	8
Transfers in	....	....	....	....	8
Legitimate by marriage of parents	....	....	....	....	3
Removals, including transfers out	....	....	....	....	14

Premature Infants.—The following Table gives the information about premature Infants :—

Number of premature babies notified who were born—

(i)	(a)	At home....	....	....	....	—	42
	(b)	In hospital	....	....	....	—	38
(ii)	The number of those born at home—						
	(a)	who were nursed entirely at home	....	....	....	—	38
	(b)	who died during the first 24 hours	....	....	....	—	11
	(c)	who survived at the end of one month	....	....	....	—	25
(iii)	The number of those born in hospital—						
	(a)	who died during the first 24 hours	....	....	....	—	3
	(b)	who survived at the end of one month	....	....	....	—	32

Home.—Of the children (42) born at home 38 were nursed entirely at home. Four were moved to the Maternity Ward. Two children died. Seven deaths during the first 24 hours were due to prematurity, three to debility and one to atelectasis. Four other children died

before attaining the age of one month, two from prematurity at the 7th and 9th day, one from debility at 2 days and one from acute bronchitis at 3 weeks.

Hospital.—38 premature babies were born. There were three deaths during the first 24 hours from prematurity. Two others died at 3 days from prematurity, one at 3 days from haemorrhagic disease of the newly-born, one other at 11 days from haemorrhagic disease of the newly-born, one other at 3 weeks from broncho-pneumonia.

Scabies and Verminous Heads.—There were 203 cases of scabies and 1,564 cases of verminous heads. The treatment with benzyl benzoate has given excellent results in the former condition, and even the worst cases are generally cured after three applications. Very satisfactory results have been obtained in the latter conditions by the use of lethane oil.

WATER SUPPLY AND SEWAGE DISPOSAL, ETC.

Water Supply.—The following information has been kindly provided by the Water Engineer, G. S. Short, Esq., M.A. I.L., A.M.Inst.C.E., P.A.S.I., Ll.B., to whom I am indebted:—

The supply is pumped from the River Tees, is treated with alumina ferric and with sodium aluminate and is passed to the settling tanks where it remains for a period of about six hours. Water is then pumped through pressure filters and after filtration is treated with chlorine and ammonia. To counteract the possibility of plumbo solvency lime is added before the water leaves the works.

During the year bacteriological examinations of the raw filtered and chlorinated water were made on 52 occasions and on tap water from different areas of the town on 53 occasions. In addition one chemical analysis was undertaken, the result of which is shown below. The analyses were made by the Borough Analyst. The results show that a uniformly high standard of quality was maintained throughout the year.

Chemical Analyses Taken 4th October, 1946.

	River Water	Town Water
	parts per 100,000	parts per 100,000
Chlorine as Chlorides	1.1500	1.15
Nitrogen as Nitrates ... ..	.0625	.0742
Ammonia ... ..	.0046	.0218
Albuminoid Ammonia ... ..	.0140	.0091
Oxygen Absorption ... ..	.9780	.1304
Injurious metals	None	None
Total solid matter dried at 100°C. ...	16.0000	14.0000
pH value	7.3	7.3
Temporary hardness ... ..	.8degs.	5.2degs.
Permanent hardness	8.0degs.	5.4degs.
Colour of sample on Hazen scale ...	89	6
Appearance of sample in 2ft. tube ...	Not clear.	Clear.
Odour when heated at 50°C	Faint earthy.	None.
Microscopical examination ...	Considerable deposit from $\frac{1}{2}$ gal. consisting of earthy matter, vegetable debris, fungus growth and micro-organisms.	Satisfactory

The water consumption continued to increase, as will be seen from the following table, though the increase was not as rapid as during the war years.

<i>Year ending 31st March.</i>	<i>Gallons pumped.</i>
1939	1,286,520,000
1940	1,363,100,000
1941	1,593,520,000
1942	1,670,190,000
1943	1,726,350,000
1944	1,863,230,000
1945	1,861,210,000
1946	1,899,870,000

A scheme for the provision of an additional battery of seven pressure filters, and for additional chemical plant is under consideration by the Ministry of Health, and it is hoped that this work will be put in hand during 1947.

So far as quantity of water is concerned, that there are ample supplies available in the River Tees is shown by the following records taken when the River was flowing at its lowest recorded level in 1938.

	<i>Galls. per day.</i>
Water pumped by Tees Valley Water Board	6,500,000
Water pumped by Darlington Corporation	4,700,000
Flowing over Weir	22,000,000
Total	33,200,000

The water is pumped direct to the town to a covered service reservoir at Harrowgate Hill. The capacity of this Reservoir is 7 million gallons.

In order to guard against the possibility of typhoid infection it has been and will be the regular practice to examine all employees of the Water Undertaking before they commence work.

The approximate total number of dwelling houses within the Borough is 23,670 and the whole of these are supplied from the water mains direct into the houses except 75 which are served by stand pipes, that is, out of a total population of approximately 82,710, 260 are served by stand pipe.

Rivers and Streams.—The slow running River Skerne enters the town at its east boundary at Haughton-le-Skerne, from whence it flows west and then south. It is crossed by 12 road bridges and is the natural channel for floodwater in the case of heavy rain.

Although in 1942 the evidence of pollution was well marked at the point where the River enters the town, recent analyses have shown that there is an improvement in the quality of the water, nevertheless, it will take some years before the River bed cleanses itself of the colliery washings deposited over a period of years.

Analyses will continue to be made.

Active steps have been taken to see that pollution does not take place in the Town itself and the majority of the manufacturers concerned are co-operating with the Corporation to see that offensive effluents are not discharged into the River.

The larger articles of refuse put into the River by irresponsible persons are now removed twice a year by the Corporation.

Swimming Baths.—The Public Swimming Baths are situated in Gladstone Street, and consist of two large pools. The First Class Bath is used largely in the summer and covered during winter to form a spacious Public Hall accommodating an audience of 1,500. The Second Class Pool is kept open during the greater part of the year.

Every precaution is taken in Darlington by continuous filtration and chlorination to produce a clear, sparkling, attractive water free from germs of disease, and of a bacterial purity approximating to that of drinking water. The continuous treatment, completed every four hours, affords also important economies in heating and water supply. Accurate dosage of coagulant (sodium aluminate) and gaseous chlorine is ensured by routine checking.

Sewage and Sewage Disposal.—The policy of the Council, to introduce storm water relief sewers and the partially separate system of drainage continues and it is anticipated that work on the construction of a new Main Outfall Sewer from the centre of the town to the Sewage Disposal Works will be commenced during 1947. The whole of the sewage is treated at the Stressholme Sewage Works where one half of the flow receives preliminary treatment in sedimentation tanks and is then treated by broad irrigation on the Stressholme Farm. The remainder is dealt with by the Sewage Purification Works completed in 1942 which consist of detritus and sedimentation tanks, percolation filters, humus and storm water tanks. A satisfactory effluent is being produced at the new works, being slightly better than the effluent from the land which has been greatly improved by the relief it has been possible to give as a consequence of the construction of the Purification Works. A scheme for providing four additional percolating filters to deal with the flow from proposed industries is in course of preparation.

Disposal of the Dead.—Three large Cemeteries one of which is in course of extension and a Crematorium provide adequate places for disposal.



COUNTY BOROUGH OF DARLINGTON

ANNUAL REPORT

of the

SCHOOL MEDICAL OFFICER

W. E. ORCHARD, ~~B.Sc.~~^{B.D.}, D.P.H.

for the

Year Ending 31st December, 1946.

ANNUAL REPORT, 1946.

Health Centre,
Greenbank,
Darlington.

*To the Chairman and Members
of the Education Committee.*

Ladies and Gentlemen,

I have the honour to present my report for the year 1946 on the health of the school children of Darlington.

The satisfactory standard of nutrition seen in the children in Darlington is unquestionably due to the wise and far-sighted policy of providing school meals and extra milk. This diet, which is the subject of careful selection on the part of the School Meals Service Staff and which is cooked and prepared by the most modern hygienic methods, conserves the nutritious elements of raw foodstuffs.

The service of school meals leaves a lot to be desired. The practice of feeding in classrooms is unavoidable with the present limited accommodation, and in future planning thought will have to be given to the inclusion of dining facilities in the schools. This aspect of communal feeding has been well recognised by those bodies catering for large numbers of people feeding at one time, and bright and attractive surroundings increase the food value of the diet.

There has been no appreciable waste during the distribution of one-third of a pint of milk per child and schools have been informed of the necessity for keeping the milk out of the sun and in a cool place during the day. In addition the periodic bacteriological examination of the milk from the samples taken by the Health Department Sanitary Staff has been entirely satisfactory. Arrangements have been made by the Education Office to provide milk for those children who are ill and otherwise unable to obtain it in school.

From these provisions it is evident that the supply of milk in schools, which has been called the "most important single factor in the maintenance of the health of school children," is under careful control in Darlington and distributed in a manner which results in the maximum benefit to the school population.

Handicapped Pupils.—The ascertainment of handicapped pupils has proceeded energetically during the year, and in the body of the report a statement on the present position is given. There is no doubt, however, as far as the partially deaf children are concerned, the means of ascertainment in the past have been primitive and many cases of deafness of a sub-clinical type exist. With the appointment to the staff of an investigator of hearing defects, specially trained in audiometric methods, a determined attack on the problem of ascertainment began. A pure tone gramophone audiometer was obtained on loan

from Manchester and samples were examined from the schools in the North End of the town. This investigation will be continued until the extent of this type of handicap is known amongst the Darlington school children.

Child Guidance Clinic.—I am able to report with the greatest pleasure my appreciation of the value of the Child Guidance Clinic and the co-operation of the Educational Psychologist and Psychiatrist. The work of this department is becoming more generally known throughout the town and it is certain that when the services of a Psychiatric Social Worker can be secured the results will be even better.

Ophthalmic Service.—During the year the resignation of Mr. Paterson on his retirement from active practice was received with great regret, and his valuable work throughout the years of his service with this department is well known to you all. We are fortunate in having a successor in Dr. McGarrity, who is a Specialist in Ophthalmic Medicine and Surgery.

In conclusion, Mr. Chairman, Ladies and Gentlemen, I wish to thank you for your support and I wish to record my appreciation of the more than cordial co-operation of the Chief Education Officer and his Staff.

I have the honour to remain, Ladies and Gentlemen,

Your Obedient Servant,

W. E. ORCHARD,

School Medical Officer.

MEMBERS OF THE EDUCATION COMMITTEE.

Councillor B. Dodd (The Mayor, till Nov., 1946) (till 29/1/46 and from 9/11/46).

Ald. H. P. Bell, J.P. (Chairman) (till Feb., 1946) (Vice-Chairman) (from Feb., 1946).

Ald. R. Luck (Chairman) (from Feb., 1946).

Ald. A. J. Best, J.P.

Coun. H. Buckborough.

Ald. S. Hardwick, J.P.

Coun. J. Neasham.

(till 29/1/46)

Coun. Mrs. M. Lyonette, J.P.

Ald. W. Heslop, J.P.

Coun. Mrs. A. E. Nelson

Ald. J. D. Hinks, J.P.

(till 29/1/46)

Ald. W. G. Chandler, M.B.E., J.P.

Coun. Mrs. M. M. Taylor, J.P.

Ald. T. E. Hudson.

Coun. H. Wilcock, J.P.

Ald. J. Waters, M.P.S.

(from 7/2/46)

(from 7/2/46 to 29/10/46)

Coun. W. S. Hutton

Coun. J. Clayton, F.R.I.B.A.

(from 7/2/46 to 29/10/46)

(till 29/1/46)

Coun. F. W. Reed

Coun. J. D. Sinclair, O.B.E.,

(from 7/2/46)

M.R.C.S., L.R.C.P.

Coun. A. W. Caragher

Coun. M. Lyonette,

(from 9/11/46)

(Vice-Chairman till Feb., 1946)

Miss O. M. Stanton, M.A.

SCHOOL MEDICAL AND DENTAL SERVICE STAFF.

School Medical Officer.

W. E. Orchard, M.D., D.P.H.

Assistant School Medical Officers.

F. A. Paul, L.R.C.P., D.P.H.

Annabella McGarrity, M.B., Ch.B., D.P.H., D.O.M.S.

Ophthalmologist.

A. T. Paterson, M.D., F.R.C.S. (Ed.), D.P.H. (Part-time) (Resigned 14/11/46).

Senior Dental Officer.

J. L. Liddell, L.D.S.

Assistant Dental Officer.

V. L. L. Hall, L.D.S. (from 21/2/46).

Psychologist.

H. G. Armstrong, M.A., Ed.B. (full-time from 14/5/46).

Psychiatrist.

Brenda E. Ridley, B.A., M.B., B.Ch. (Part-time).

Teacher of Classes for Children Who Experience Hearing Difficulties.

Muriel Scott (Part-time) (from 27/8/46).

Senior School Nurse.

Gladys M. Whittaker.

School Nurses.

Doris M. Goodinson.

Hilda M. Gardiner.

Laura Addison.

Margaret Borwell.

Clerks.

Audrey C. Smith (Senior Clerk). Rita Burn.

Patricia Harris.

Margaret E. Burrell (till 28/8/46).

Doreen Dodgson (till 28/2/46).

Helena M. Stellakis.

(from 27/5/46).

School Population.

School Population 2—5 years	490
" " 5 years and over	...	...	...	...	10,802
Total School Population					11,292

Average Attendance in Primary and Modern Secondary Schools	90%
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Routine Medical Inspection.

2,615 routine inspections were carried out in the Primary and Maintained Secondary Schools, and the classification of nutrition was as follows:—

A. (Excellent)	...	...	...	...	...	10.1%
B. (Normal)	...	...	...	...	...	88.8%
C. (Slightly Subnormal)	...	...	...	...	...	1.1%
D. (Malnutrition)	...	...	...	...	...	—

School Meals and Milk.

950,447 meals were distributed during the year, of these 63,783 were free, an average of 4,774 per day.

2,103,210 bottles of milk were supplied during the year, of these 825,431 were provided free of cost.

The scheme under which all school milk is provided free of charge came into operation on 4/8/46.

Minor Ailments at the School Clinic.

2,669 minor ailments were treated, including 278 cases of impetigo and 203 cases of scabies. In all 15,492 attendances were made for treatment and advice.

School Nurses.

During the year the Nurses paid 504 surprise visits to the schools and 1,564 children were found to have unclean heads. Home visits and advice in school resulted in the number being reduced to 864 at the end of the year.

2,782 home visits were paid by the Nurses, for the purpose of following up defects other than cleanliness.

SCHOOL MEALS SERVICE.

Week 1.

Monday. Shepherd's Pie, Grated Cheese on top, Gravy, Mashed Potatoes, Swedes and Carrots mashed well together.
Barley Kernel Pudding, Jam.

Tuesday. Cold Sliced Corned Beef, Gravy, Mashed Potatoes, Marrowfat Peas.
Steamed Ginger Sultana Pudding, Sweet Sauce. Cheese. Biscuits.

Wednesday. Hot Roast Beef, Gravy, Mashed Potatoes, Yorkshire Pudding. Greens.
Steamed Sponge Pudding, Orange Juice Jelly, Custard Sauce.

Thursday. Meat Pie, Onion Gravy, Mashed Potatoes, Cooked Diced Carrots.
Stewed Prunes, Custard, Mock Whipped Cream.

Friday. Stewing Steak and Onions, Mashed Potatoes, Cooked Greens, Raw Grated Carrots.
Steamed Ginger Pudding, Sweet Sauce.

Week 2.

Cold Sliced Corned Beef, Mashed Potatoes, Raw Grated Carrots, Mashed Swedes.
Steamed Chocolate Pudding. Jam Sauce made with milk.

Cornish Pasty, Onion Gravy, Mashed Potatoes, Greens.
Barley Kernel Pudding. Stewed Prunes.

Roast Pork, Onion Gravy, Mashed Potatoes, Yorkshire Pudding, Mashed Swedes.
Christmas Pudding, Custard Sauce.

Cold Boiled Ham, Mashed Potatoes, Salad of Beetroot, Raw Carrot, Peas, Diced Celery.
Mincemeat Pie and Custard, or Cream Trifle or Jam Tarts, Custard Sauce and Mock Whipped Cream.

Meat Pie, Onion Gravy, Mashed Potatoes, Cooked Diced Carrots.
Stewed Prunes, Custard, Mock Whipped Cream.

Tonsils and Adenoids.

138 cases received operative treatment at the Memorial Hospital.
Immunisation Against Diphtheria.

568 children completed a full course of immunisation and 994 were given re-inforcing injections.

Percentage of School Population immunised—56%.

Schick Tests were carried out as given below:—

Anterior.						Number Positive.
507	...	...	...	...	...	247
Posterior.						Number Positive.
1,833	...	...	...	...	...	402

REPORT OF OPHTHALMOLOGIST.

There is nothing of especial interest to relate in regard to the incidence or the treatment of defective vision among school children that has not been said before.

The scheme for the provision of free spectacles has been most appreciated by the Parents, but experience has shown in other Clinics I am associated with that there is a greater tendency for children—especially the poorer type—to lose or take bad care of their spectacles—perhaps this is the old story of “Come easy, go easy.”

I have in previous reports pointed out how, in my somewhat lengthy experience, the incidence of minor eye diseases has tremendously decreased—ulcerative conditions of the cornea which years ago resulted in severe and permanent damage to children’s eyesight now are rarely seen, and when seen are rapidly cured before permanent damage is done—the cure is brought about by prompt and expert treatment at the School Clinic. There can be no doubt that a more robust constitution brought about by the provision of milk and free meals has greatly increased the child’s resistance to illness generally, and assisted in early recovery when disease manifests itself. The provision of milk and free meals may be a costly business but I am sure it is a grand investment and pays handsome dividends.

Twenty odd years ago or less I remember how difficult it was to find a place in an Institution for Blind Children owing to the many applicants, but today one of the largest Institutions for Blind Children in the North of England has no more than half its capacity occupied—this surely is strong evidence that we are doing good work somewhere.

ARTHUR T. PATERSON

M.D., F.R.C.S.(E.)

DENTAL REPORT.

All schools were visited; all children in attendance were inspected. Two schools were visited twice and 478 children were re-inspected. An inspection was carried out at Salters Lane School each term. The total inspections for the year, including 378 specials, was 10,241.

A big increase in the number of fillings is shown, 3,164 as compared with 1,230 the previous year. Extractions of permanent teeth have been reduced by 35 per cent.

J. L. LIDDELL, L.D.S.,

Senior Dental Officer.

HANDICAPPED CHILDREN.

Blind and Partially Sighted.—Four in residential schools, one in an ordinary school and one at no school, both awaiting admission to residential schools.

Deaf and Partially Deaf.—One in a residential school, six travel daily to Stockton School for the Deaf, one new case being admitted during the year, and 24 are attending special classes.

Epileptic.—One excluded from school attendance.

Delicate.—Ninety-seven in Open Air School, three awaiting admission to the Open Air School, one in a sanatorium admitted through the T.B. Dispensary, six excluded from school, one excluded half-days from school and 25 who can be educated in ordinary schools.

Physically Handicapped.—Four orthopaedic cases in residential institutions admitted through the T.B. Dispensary during the year, one in hospital, 11 in the Open Air School, four excluded from school attendance and 28 who can be educated in ordinary schools.

Educationally Subnormal.—Three in residential schools, 53 in Barnard School and six in ordinary schools.

Multiple Defects.—One in a residential school, 24 at Barnard School, seven at the Open Air School and one excluded from school attendance.

Speech Defects.—Seventy-two in attendance at ordinary schools.

Salters Lane Open Air School.

Clothing and Footgear.—With very few exceptions the children at this school are well shod and clothing is of a good quality and in good condition. The underwear also of the children is in very good condition considering the coupon difficulty at the present time.

Cleanliness.—No children were found to be suffering from verminous conditions of the body. Head cleanliness is supervised weekly and regular "hair drill" is carried out.

Treatment of Minor Ailments.—An average of 25 cases per day are treated for slight impetigo, sore throats, rheumatic pains, blepharitis, otorrhoea, injuries etc., the more serious cases being referred to the Assistant School Medical Officer. The value of having a Nurse on daily duty at such a school is very evident.

Vitamins.—All the children are given Vitamin D and two-thirds of a pint milk daily, in addition to the mid-day meal.

The number of children on the register on 31st December, 1946, was 115.

Barnard School for Educationally Sub-Normal Pupils.

At the end of the year 77 children were in attendance, 21 children have been admitted and 13 left.

CHILD GUIDANCE CLINIC.

Successful adjustments last year were reported as high as 70 per cent., but this year they have dropped to 60 per cent. Fully staffed Clinics which have attempted estimates put them at 50 per cent. Attendances for the past two years have been approximately 80 per cent.

Table 1.

	Educational Difficulties	Behaviour Disorders	Nervous Disorders	Habit	Total
January	—	—	—	—	—
February	8	2	—	2	12
March	12	1	—	6	19
April	9	2	—	1	12
May	9	2	2	2	15
June	11	3	3	3	20
July	13	1	4	2	20
August	6	—	3	1	10
September	18	—	2	1	21
October	15	—	1	1	17
November	14	6	—	8	28
December	8	—	4	4	16
	123	17	19	31	190

Table II.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Appointments Made	112	120	149	72	152	158	160	84	113	102	122	96	1,440
Appointments Kept	91	96	117	51	120	133	124	64	92	88	106	80	1,162

H. G. ARMSTRONG, M.A., Ed.B.,

Educational Psychologist.

Nursery Schools and Classes.

597 routine inspections were carried out in the above schools. 8.5 per cent. were classified as Nutrition "A" (Excellent) and 91.5 per cent as Nutrition "B" (Normal).

Medical Examinations of Staff.

Ninety-five teachers, clerks and others were examined and certified fit to commence duty or able to return to duty after prolonged illness..

Infectious Diseases and Deaths Amongst School Children.

	Cases.	Deaths.
Scarlet Fever	91 ...	—
Diphtheria	25 ...	—
Measles and German Measles	27 ...	—
Whooping Cough	32 ...	—
Tuberculosis	14 ...	—
	<hr/> 179 <hr/>	<hr/> — <hr/>

REPORT ON PHYSICAL EDUCATION, 1946.**1. Physical Education in Schools.**

(a) *Demonstrations and Courses for Teachers.*—A course was held for teachers in Primary Schools with over 60 members. Its object was to show the modern approach to physical training where the stress is laid on informal presentation and performance of movement. Junior children were used for the demonstration at each class and the School Medical Officer (having previously visited the schools to see the work) gave an interesting talk to members of the Course. On this occasion it was decided that lists of minor defects should be sent to the Physical Training Organiser in order that remedial exercises should be given to individuals as there was no room for classes at the School Clinic.

Improvised agility apparatus such as ladders, poles, stands, was used by classes of children who had been prepared by foot, relaxation exercises, and landings. All the exercises and activities shown during the course were ex-syllabus in preparation for the use of scramble nets, parallel ropes and other agility apparatus ordered for experiment in certain schools.

(b) *Playing Fields.*—Every child in the Secondary Modern Schools has had the opportunity of a weekly visit to a playing field and where schools were situated at an unreasonable distance from a field for the first time free transport has been provided.

Swimming During School-Time, May to July.

1. *Instructors.*—One full-time and two part-time Instructors were appointed.
2. The Second Class Bath has been set aside for the sole use of school-children for 15 hours in the mornings and 10 hours in the afternoons during each week.
3. Arrangements were made for nearly 2,000 children to swim each week.
4. Free transport has again been provided.

5. Uniform testing for certificates has been carried out and the following awards made:—

Mile	...	...	...	...	...	50
Half-Mile	...	...	...	...	...	34
Quarter-Mile	...	...	...	...	...	53
Five Lengths	...	...	...	...	...	142
One Length	...	...	...	...	...	387
One Breadth	...	...	...	...	...	207

These show a good increase on 1945 results.

Swimming During Summer Holidays.—July and August (excluding August Bank Holiday week).

An average of 2,000 children attended each week for free instruction from the Committee's instructors during the same periods as during the school term.

Winter Swimming.—A winter swimming scheme for boys and girls from Secondary Modern Schools was ready to be implemented for the first time when the fuel situation became so acute that it had to be abandoned.

(c) *Tennis Coaching.*—Major Appleby, the Lawn Tennis Association's professional coach for the North, gave a one-evening demonstration of tennis coaching for teachers and leaders. It was well attended and it was proposed that a course of lectures should be arranged with the L.T.A. to follow this up.

Physical Activities in Connection with the Youth Service Courses.

1. *Keep-Fit Class.*—Membership of 25—two selected to represent the North at Wembley National Festival of Youth.
2. *Ballroom Dancing.*—Membership of 35.
3. *Netball Coaching.*—In the South Park—attended by an average of 12.
4. *Rounders Coaching.*—At Eastbourne—attended by 40 boys and girls.
5. *The U.C.P.R. Course at Lourther Castle.*—Three Junior Leaders attended.

Competitions.

The Turner Cup.—Won by Albert Road Y.C.

The Rolling Mills Netball Tournament.—Won by Eastbourne Y.C.

Victory Celebrations.—Juniors won by St. Herbert's.

Seniors—Finals postponed.

Swimming.—Special arrangements were made during the period May—July to provide free instruction for members of Youth Organisations on one night each week for two hours. An average of 100 attended up to the Summer Holiday.

J. O. M. HOWE,

Organiser of Physical Training.

